

FROM THE VC'S DESK



With the rapid and great advancement of information and communication technology (ICT) in recent years, one can envision that wide-spread use of computers and telecommunication services together with the related applications by

our students and staff for their learning, teaching, research and administrative activities will be an inevitable development. In the next few years we would expect a big increase in the number of staff and students and they all will be heavily relying on the use of computers and access to the Internet via the campus network for their everyday activities.

In moving Unimas towards a digital university in the near future, it is important for us to update and upgrade our campus network infrastructure with substantial increase in bandwidth and capability so that the campus community are provided with the support needed to facilitate their teaching and other academic activities. We are pleased that Unimas is now embarking on a major development work in

upgrading the campus network, known as UnimasNet.

The overall project to upgrade UnimasNet can be divided into three parts. The first part is involving the overall performance study of the existing network to identify the problem areas with regards to the traffic flow and possible sources of congestion. Rectification work have been done and completed at the end of last year which involved some cabling work, network termination and performance measurement of the network.

The second part of the project will take place next year and it involves the upgrading of UnimasNet. The existing network that supports 100 Mbps is fast becoming congested with the increase number of users and also due to the multimedia-rich contents being sent and received via the network. In this phase, we hope to upgrade the network utilising the state-of-the-art Gigabit networking technology. This new technology allows the network to support bandwidth in the range of several gigabits per seconds (Gbps) and with this capability we hope that network congestion would be minimised.

The third part is involving the deployment of a new ICT infrastructure for the new facilities

building for the Faculty of Medicine and Health Sciences in Kuching. The work has started in early July 2002 and is expected to complete by the end of September 2002. The networking infrastructure work will include the deployment of structured cabling to support Gigabit technology, wireless local area network and connection to the existing campus.

This upgrading work is very important to support the current development of the existing campus and also the Faculty of Medicine and Health Sciences facilities in the city. In addition, recently we have started the construction of stage 1 phase 1 of the new permanent campus situated adjacent to the current temporary campus. In this construction package we also include the provision of IT works that involve the deployment of structured cabling system, Gigabit network, centralised computing systems and a number of critical applications such as generic office environment (GOE) system, Unimas Portal, Smartcard, E-Learning system and Integrated Library System. This advanced ICT infrastructure should be able to support the immediate university's requirement at the permanent campus which is expected to be ready by July 2004.

E-Learning: Changes and Challenges at Unimas

Over the last decade, the Internet has penetrated our lives in many forms and levels. The new skills and competency requirements of the emerging information society arise from the rapid and systemic changes in work, education, leisure and society. Knowledge will be, and in many areas already is, the most critical resource for social and economic development. As a consequence of these changes in western societies, educational institutions and training systems need to develop new pedagogical and cognitive models and practices, as well as new technologies in order to cope with the challenges of the emerging knowledge society. These challenges cannot be met without the restructuring of learning delivery, and E-Learning could be a key driver of this change.

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Changes in Higher Education

The nature of teaching and learning has also evolved. Peter Drucker, one of the leading management experts in the world, once said, "In the next 50 years, schools and universities will change more and more drastically than they have assumed, since their present form more than 300 years ago." Last year, the Massachusetts Institute of Technology (MIT) has made a bold move to embark in a project called The OpenCourseWare (OCW) initiative. This project will make the materials from virtually all of its courses freely available on the World Wide Web for non-commercial use. It reflects MIT's institutional commitment to disseminate knowledge across the globe. Stemming from the notion that the best universities (with richest academic ecosystem) will attract the best minds, this initiative instantaneously positions MIT as a leading knowledge "warehouse", and it communicates the idea that their distinguishing value as one of the world's best universities lies within the communication quality of its academia and the richness of their learning environments at MIT. Since its encapsulation, many other eminent universities like Stanford and Harvard have joined the open learning bandwagon.

How does this MIT initiative affect Unimas? As quoted from an article in a leading E-Learning magazine recently, "The OCW initiative may greatly affect other colleges and universities, for-profit e-learning suppliers, and other deliverers of education worldwide. The existence of OCW means that other leading institutions will feel pressure either to imitate MIT or to develop alternative approaches, and market-driven companies will have to move well beyond mere content to differentiate themselves" (WJ Salter, 2002). The profound implication onto us is: now, the scope of our competition for high-quality student candidates and academic staff is no longer limited to only local universities, but we have to compete with Ivy-league universities in a continent half a world away to attract the best and brightest students.

Our Challenges

To achieve our aspiration to become a hub for scholarship activities, we need to ask ourselves:

“What is the unique value of Unimas that will position it as a viable university of choice well into the future?”

One of the first steps we took to create a competitive advantage as a public university in Sarawak is to consider E-Learning as an element to enhance the quality of Teaching and Learning at our campus. As a forward-looking university, which emphasizes on life-long learning as a mission for all students and staff, Unimas is now leading the way in offering E-Learning as a tool to supplement teaching-learning activities on campus.



Lecturers trying their hand at creating their very own online courses

E-Learning at Unimas is poised to become the impetus to provide practical, systematic change strategies to create a new, technologically competitive academic organization. This will require changes in both teaching and learning methods as E-Learning almost inevitably introduces a more interactive and learner-centric way of learning into classrooms and training environments. High quality educational content is needed for everyday use in order to inspire and motivate both educators and learners. However, the digital educational market is only just starting to emerge and innovative models of co-operation between the public and private sectors are being sought to enhance the continuing development of this market.

As the unit that undertakes all matters pertaining to E-Learning, we are focusing our efforts on these aspects of Teaching and Learning on campus:

- To enhance curriculum design, content and organizational objectives
- To empowering scholars by enhancing education and training at all levels using technology
- To benchmark success in technology integration within the university's education system



Lecturers listening attentively during the Introduction to Online Learning session

How Online Courses are Created

We facilitate lecturers to create their very own web-based learning environments; and these lecturers then use the webspace to communicate ideas, thoughts and issues on the subject matters that they teach, and at the same time, they promote bonding between the students of the course, as a strategy to enrich the learning experience. Using a user-friendly content editor, lecturers are able to assemble their notes, bookmarks and other important reading materials for their class. Students also find it useful, because when they have questions about the contents of the course, they can easily send out messages on the course discussion board, and their instructors and peers are able to respond to (and learn from) the queries.

During the last semester break, academics from 4 faculties (FEB, FENG, FIT and FCS) have undergone The Online Learning Workshop series, and as a result, there are now 143 “course cubes” hosted on two E-Learning servers, which have been created by these innovative and dynamic lecturers. Most found the E-Learning mechanism to be favorable for their course development, and they foresee its value as an appealing motivational tool to spark interest among students to learn more about the courses offered at the university.



How do I load my tutorial questions online?...another scene from the Hands On session at the recent Online Learning Workshop

To enhance the university's capability to systematically design, develop and archive these web-based learning environments, the University E-Learning Committee has approved a proposal to purchase a comprehensive E-Learning system. The system is expected to manage all data creation, publishing and archiving tasks systematically. With learning content, which are metadata-tagged on the E-learning system, the next step of development will be focused on integrating the data to the university's Digital Library initiative. This will enhance the roles of the academic staff as content creators, which will continuously fuel the scholarship development at the university.

Soon, the E-Learning unit will publish a quarterly bulletin on Teaching and Learning, a means to enable academics to keep abreast with the most up-to-date issues in higher education. This is one of our strategies to build a dynamic, global and high-quality group of educators of the 21st century.

For further inquiries, please contact:

E-Learning Helpdesk: ext 249

E-Learning website: www.elearning.unimas.my

E-Learning Unit email: elearning@calm.unimas.my

CENTRE FOR ACADEMIC INFORMATION SERVICES (CAIS UPDATES)

More full text information resources available online!

LECTURE NOTES IN COMPUTER SCIENCE (LNCS)

LNCS series can be accessed via the Springer LINK URL :

<http://link.springer.de/> OR
<http://www.link.springer.de/link/service/series/0558/>

The series cover new developments in computer science research and teaching. In 2000, 240 volumes were published in the series. Of these 15 are monographs and the rest are edited, multi-author volumes.

IEL ONLINE

The database is accessible via IP authentication through the following

URL: <http://www.ieee.org/ieeexplore>

The database provides full text to IEEE transactions, journals, magazines and conference proceedings published since 1988 and all current IEEE Standards.

PROQUEST Education Complete PROQUEST Education Journals

These 2 databases can be accessed via IP authentication through this URL: <http://www.umi.com/pqdauto>

PROQUEST Education Complete

Contains more than 550 titles on education--including primary, secondary, and university-level topics--with nearly 300 in full text. Includes the indexing and abstracts from H.W. Wilson's Education Abstracts, plus many additional titles.

PROQUEST Education Journals

Contains over 250 leading full text journals in education and related fields.

BIOMEDNET(BMN) REVIEWS

Includes 25 Current Opinion & Trends titles plus review articles from all Elsevier Science's Life Science journals. Access is via the following URL:

<http://reviews.bmn.com>

COMPUTER DATABASE

The database can now be accessed via IP authentication through the following URL:

<http://infotrac.galegroup.com/itweb/unimas>

This database provides a combination of indexing, abstracts and full text for leading business and technical publications in the computer, telecommunications and electronics industries.

SCIENCE DIRECT

The above database can now be accessed via IP authentication through the following

URL: <http://www.sciencedirect.com>

Provides online access to selected Elsevier Science journals and 3 subject collections on Medicine, Business Management & Accounting and Biochemistry, Genetics & Molecular Biology.

More E journals!

CSIRO Publishing

<http://www.publish.csiro.au/journals/>

INFORMS PubsOnLine

<http://pubsonline.informs.org/library/>

Botanical Society of America

<http://www.amjbot.org/>

Marcel Dekker, Inc.

<http://www.dekker.com/servlet/product/productid/CSS>

AACE-Association for the Advancement of Computing in Education

<http://www.aace.org/pubs/etr/>

American Society of Mechanical Engineers

<http://ojps.aip.org/ASMEJournals/>

The American Phytopathological Society

<http://www.apsnet.org/>

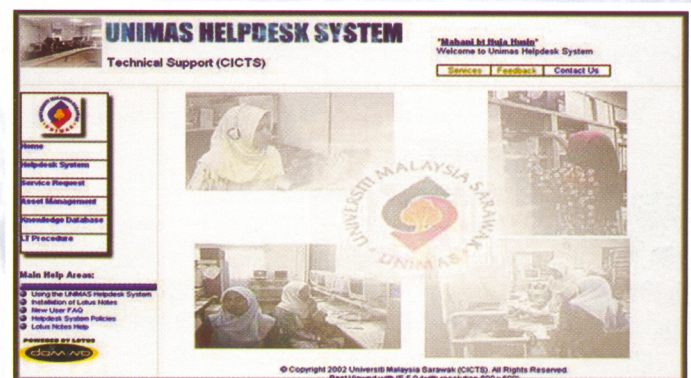
Kluwer

<http://www.kluweronline.com/>

CICTS UPDATES

IT Helpdesk

Lotus was fully implemented in Unimas in the year 2001. Since then, Lotus E-Mail and Leave Application System were introduced. In March 2002, CICTS teamed up with Professional Computer Systems Sdn. Bhd. to develop the IT Helpdesk System. The objectives of the system are:



- to enable users to submit their service request anywhere
- to enable users to obtain information regarding their service request such as the status of their request, who is attending to it? and what has been done regarding their request
- to enable users to solve their problems through the Knowledgebase or by accessing the history records of solved cases in Service Request and Helpdesk System.
- to provide helpdesk staff with a knowledge base of requests and their corrective action
- to enable users to access detailed information of hardware and software installed
- to provide helpdesk staff with history of service request by the requestor
- to generate reminders to helpdesk staff if no action has been taken after request was lodged for a certain period of time so as to improve response time
- to provide management of CICTS with various statistical reports to check and improve their staff performance.

The system will be ready for CICTS's use by August, followed by training for the end-users in early September and expected to be ready for campus's use by end of September.

Towards The Better Way Of Communication



(Main) (Mailbox) (Change Password) (Discussion Board) (News and Events) (UNIMAS Homepage) (Logout)
For Inquiries, contact: System Administrator, Centre for Information and Communication Technology
Services, Universiti Malaysia Sarawak, 94300 Kota Samarahan Sarawak Tel:082-671000 (ext: 437)

Welcome to Student Services UPGADM

Nowadays, the barrier of communication between students, lecturers, and the university's administration widen, as they are all busy catching up with work, assignments and curricular activities. Time is the limit factor for everyone. Communication has to be done, and it has to be done properly and effectively. Student e-mail service is the best solution for the communication and transaction barrier between us. In order to achieve our mission in becoming an established university, our communication channel must first be improved and standardised. Effective communication will contribute highly in uplifting the image of Unimas as the university that is inline with the latest buzz in technology, namely Information Technology.

This service is packaged with *Student Discussion Board* and *News and Events* applications in order to maximise the usability of the service.

• Email application

Students can have access to this service at <http://upgmail.unimas.my>. User name: refers to students' matric number and Password: have been announced and it is their own responsibility to change their password to avoid any security problems in terms of privacy.

• Student Discussion Board application

This application is designed for students to "voice-out" their opinion. However, at the meantime, only messages from the university's administration are posted and displayed. As for the students, they are allowed to post anything that they feel important. Even so, their messages will be monitored to avoid any misuse. The administrator will delete any irrelevant or inappropriate messages. For those academic or non academic staff who would like to post their messages in the Discussion Board, they can send their email to [noc_cans](mailto:noc_cans@unimas.my) or [noc_ppp](mailto:noc_ppp@unimas.my). These are the people who are responsible to post the messages for them.

• News and Events application

This application will be developed soon. When the application is ready, messages that come from the university's administration will be posted here. This application is not only limited to public announcements but also include important announcement by the faculty regarding exam schedule, changes of class venue and so on.

Up to now, 5467 email accounts have been registered. The first phase of registration process involved only the existing students and the service was ready to be used by May 29, 2002. For the new students intake, the registration process has completed on July 12, 2002. The availability of the service has been announced on the same day and ready to be used by July 15, 2002.

The Unimas Virtual Reality Laboratory

The task of setting up Malaysia's first Virtual Reality Laboratory, which will provide the university's first fully sophisticated Virtual Reality (VR) technology in the country that have been specifically designed not only for research and development in the field of VR but also to cater projects from industries around the region. VR is a completely new medium of interactivity that combined the skills in arts and science. VR demonstrate great promise as a research tool in product design, architecture, engineering, biotechnology, and computational science.

The Unimas VR Laboratory is divided into three sections,

- Visualization Lab
- Viewing gallery
- A Cube for viewing VR in a fully immersive environment.

Treat yourself to a new experience of VR world, as the VR team will organize its first open day in conjunction with Unimas's sixth convocation ceremony, which will be held on August 15, 16 17 and 18, 2002, 9:00 am – 4:00 pm.

This VR Lab is managed as Unimas's central R&D laboratory under the Chancellery, and chaired by Prof Khairuddin B Ab. Hamid, Deputy Vice Chancellor (Development), headed by Sharkawi Che Din, and assisted by seven academics.

We hope to launch the Laboratory by the end of September 2002.

For further information, e-mail: cdsharka@faca.unimas.my or Phone: 082-671000 ext 448, 594, Fax: 082-672404.



Alias Wavefront MAYA training conducted by
Sharkawi Che Din.